

fourth cases there was ankylosis; but in the first and third a movable ankle-joint resulted. These two latter patients are now frequently seen by the Professor, and they are able to walk to any distance without inconvenience.

In consequence of the good results thus obtained, the Professor determined on setting out for the Schleswig-Holstein campaign to perform the operation whenever suitable cases might offer. He did it five times between May and August, 1864. All were late operations. One patient died of hospital gangrene; all the others recovered. Two were Prussian soldiers, three Danish prisoners captured in the island of Alsén. In the first case a rifle bullet went into the malleolus internus and came out of the malleolus externus of the left foot. Both malleoli and the upper surface of the talus were resected, the piece taken out being two and a half inches long. The joint is now ankylosed, but the patient is able to walk for a quarter of an hour at a time without inconvenience. There is no shortening, and the formation of new osseous tissue has been so abundant that the circumference of the leg operated upon is much larger than that of the other. In the second case the malleoli were splintered into seventeen pieces to the length of three inches. The resection was done, but the patient died ten days afterwards of nosocomial gangrene. In the third case the lower end of the left tibia and fibula were fractured by a bullet, which went into the crista tibiæ, and came out at the back close to the tendo-Achilles. The foot was considerably dislocated. A piece of the tibia, four inches long, and broken into fourteen fragments, was removed, and the cure was quite satisfactory. In the fourth case the bullet went into the joint just below the malleolus externus, and went out by the middle of the internal malleolus. A piece three and a half inches long, being the lower end of the tibia and the upper surface of the talus, was removed. The cure was complete about two months afterwards. In the fifth case there was total crushing of the ankle-joint, with considerable dislocation of the foot. Both malleoli and the whole of the talus were removed, and the cure was complete in about two months afterwards. The last three patients, however, when last heard of, had not yet commenced walking.

All these operations were done altogether sub-periostally; the periosteum, which was very much thickened, being torn off the bone in connection with the fibrous envelop of the malleoli and the ligaments. The interosseous membrane was always most carefully spared, and this is a circumstance upon which much stress should be laid, because this membrane, being closely allied to the periosteum in texture, according to Von Langenbeck's observations, probably always becomes ossified, is completely amalgamated with the newly-formed bone, and serves to increase the bulk of osseous tissue. The Professor has, in his operation, never laid bare nor injured any tendons, vessels, or nerves. He has sawn through the bones with his stitch-saw by comparatively small incisions. If only one bone was crushed, this one only was removed, and the other bones left undisturbed, even if they were transversely fractured. The eutaneous incision was always made on the inner surface of the tibia or the outer surface of the fibula, but never before or behind these bones. If both malleoli had to be removed, a perpendicular incision was made on the middle of each bone. The operation was, as a rule, not connected with much difficulty, only in the fifth case it proved troublesome, as the whole of the talus had to be removed. The wound was always united by sutures, only a small opening being left for the escape of pus; after that the plaster of Paris splint was put on, and the wounded part rendered accessible by cutting a hole into the bandage. A day or two afterwards the splint was soaked with a solution of resin in ether, whereby it was rendered water-proof, and then local baths were employed. In most cases the first splint was left on unchanged for three or four weeks.—*Med. Times and Gaz.*, March 25, 1865.

31. *Amputation of the Leg by a Long Rectangular Flap from the Calf.*—Mr. HENRY LEE, in a paper read before the Royal Medical and Chirurgical Society (May 23, 1865), called attention to Mr. Hey's mode of operating by means of a long flap from the back of the leg, and to Mr. Teale's plan by a long rectangular flap from the front. The advantages of both these plans might be combined by making a rectangular flap from the back instead of from the front

of the leg; a thick soft cushion might thus be provided for the ends of the bones, and no large nerve need be left in the flap. The operation described was performed according to Mr. Teale's plan as far as the external incisions were concerned, but the long flap was made from the back instead of from the front of the limb. Two parallel incisions were made along the sides of the leg; these were met by a third transverse incision behind, which joined the lower extremities of the first two. These incisions, which formed the three sides of a square, extended through the skin and cellular tissue only. A fourth incision was made transversely through the skin in front of the leg, so as to form a flap in this situation, one-fourth only of the length of the posterior flap. When the skin had somewhat retracted by its natural elasticity, an incision was made through the parts situated in front of the bones, which were reflected upward to a level with the upper extremities of the first longitudinal incisions. The deeper structures at the back of the leg were then freely divided in the situation of the lower transverse incision. The conjoined gastrocnemius and soleus muscles were separated from the subjacent parts, and reflected as high as the anterior flap. This part of the operation was performed with the greatest facility, on account of the loose attachments of these muscles, especially at the lower parts of the leg. The deeper layer of muscles, together with the large vessels and nerves, were divided as high as the incisions would permit, and the bones sawn through in the usual way. The flaps were then adjusted in the manner recommended by Mr. Teale. The long flap thus formed was much thicker than when taken from the front of the leg. It was consequently less liable to slough. It afforded a much more efficient protection to the ends of the bones, and a thicker and softer pad upon which to rest a part of the weight of the body when an artificial limb was applied. Three cases were detailed in which this mode of operating had been adopted, and drawings given of the stumps after they had healed. Two other cases were mentioned. In one of these, which was performed after great loss of blood from ulceration of the anterior tibial artery, in a case of very severe compound fracture, the patient died. In the other case the patient made a rapid and good recovery. These were, the author believed, all the instances in which this particular operation had been performed.

Mr. Lee said it was well known that the object of surgeons generally was to prevent pressure on the extremity of a stump by resting the weight on the limb above the cicatrix. So engrafted with this idea are the minds of the mechanicians also that he had the greatest difficulty in persuading them to make an artificial limb which would press on the end of the stump. But an essential part of Teale's operation was that with a stump thus formed the patient should rest on it. This was the great object of Mr. Teale's operation. The cases he (Mr. Lee) had just read were the only cases in which the operation described in the paper had been performed. One of the patients operated on, and whose case was related in the paper, had just written to the nurse, challenging her to walk three miles with her. In this case particular care had been taken to see that the patient did bear on the end of the stump, and that it was not more sensitive than any other part. Mr. Lee then showed a preparation of a stump, and drawings illustrating the points of his paper.—*Med. Times and Gaz.*, June 3, 1865.

32. *Warty Ulcer of the Leg of Thirty Years' Duration; Amputation; Recovery.*—Dr. M. H. STAPLETON exhibited to the Surgical Society of Ireland the leg of a patient, afflicted for the last thirty years with an ulcer which well exhibited all the characteristics of the warty ulcer of Marjolin, and gave the following history of the case: Thadeus Dooley, æt. 50, was admitted into the Mater Misericordiae Hospital on the 1st of December, 1864. He states that when about 16 or 17 years of age, he was attacked with a great pain in his leg; that the pain was on the inside of it, and that after a fortnight the leg burst, and after a little time there came a sore which ate a hole in it which bared the sinews; that sometimes there used to be a scab on it, but that it never healed; that after some years a little nub came on the bone; that it then became a sore and ate into the bone; that he has had several *doctors* (not real ones), and that each had his way with him, but that he got no better; that some time ago a lot of proud flesh grew out of it, and that he went to a real doctor, who, he